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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,223	12/21/2001	Sam Young Ahn	8733.523.00	3348
30827	7590	08/23/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP			RUDE, TIMOTHY L	
1900 K STREET, NW			ART UNIT	
WASHINGTON, DC 20006			PAPER NUMBER	
			2883	

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/024,223

Applicant(s)

AHN, SAM YOUNG

Examiner

Timothy L Rude

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 9-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claims***

Claims 1, 2, 4, 5, and 8 are amended. Claims 24-29 are added.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: The recitation "and wherein a portion of said upper surface of is non-adjacent to said bottom surface of said light guide panel" is unclear. For examination purposes said recitation will be interpreted as - - and wherein a portion of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel - -. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (APA) in view of Furihata USPAT 6,309,081 B1.

As to claims 1, 24, 27, and 28, APA discloses in Figures 1-3 a conventional liquid crystal display module for a notebook computer (specification page 7, [0033]), comprising:

a liquid crystal display panel, 20, in which a liquid crystal is injected between two substrates;

a light guide panel, 4, for converting incident light from a light source to be directed toward the liquid crystal display panel (Applicant's flat type light), wherein the converted light is directed toward said liquid crystal display panel (specification, page 2);

a reflector, 8, for preventing light leakage through a rear surface for the light guide panel (Applicant's wrapping the bottom surface of said light guide panel);

a main support, 6, containing said liquid crystal display panel and said light guide panel.

APA does not explicitly disclose 1) a clamping member fixing said reflector and said main support, and 2) a portion of an upper surface of said reflector is adjacent to a bottom surface of said light guide panel, and wherein a portion of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel.

Furihata teaches 1) a backlight unit in Figure 1 comprising a clamping member, 300, disposed in said reflector, [60 and 300 comprise a two-piece reflector, col. 4, lines 20-32], and adjacent said main support for fixing them (col. 4, lines 62-67), and 2) a portion of an upper surface of said reflector, 60 and 300, is adjacent to a bottom surface of said light guide panel, 20, and wherein a portion of said upper surface of said reflector, 300, is non-adjacent to said bottom surface of said light guide panel, to provide proper assembly without an adhesive (col. 4, lines 59-61).

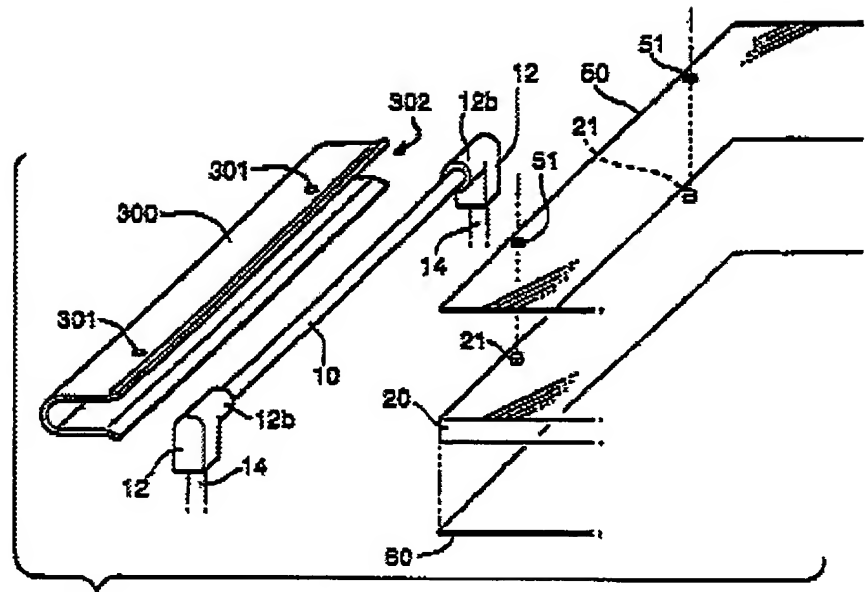


Fig. 1  
(a)

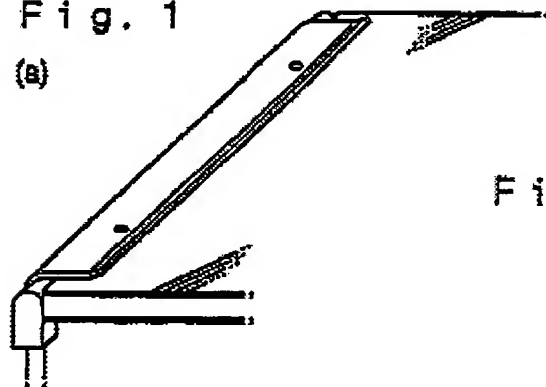


Fig. 1  
(b)

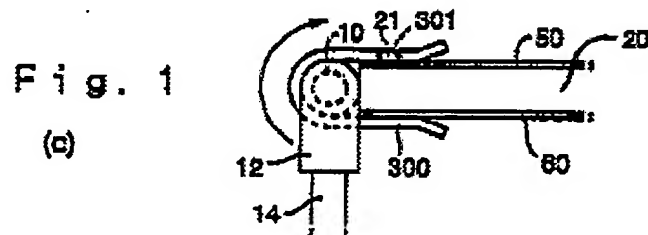


Fig. 1  
(c)

Furihata is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add 1) a backlight unit comprising a clamping member disposed in said reflector, and adjacent said main support for fixing them, and wherein 2) a portion of an upper surface of said reflector is adjacent to a bottom surface of said light guide panel, and wherein a portion of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel, to provide proper assembly without an adhesive.

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of APA with 1) a backlight unit comprising a clamping member disposed in said reflector, and adjacent said main support for fixing them, and 2) a portion of an upper surface of said reflector is adjacent to a bottom surface of said light guide panel, and wherein a portion of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel of Furihata, to provide proper assembly without an adhesive.

Examiner considers the teachings of Furihata to render the claimed invention obvious to those having ordinary skill in the art of liquid crystals at the time the claimed invention was made when combined to modify Applicant's admitted prior art (APA) per the motivation of Furihata. That is to say, Examiner considers modification of APA (starting with the design of APA) per the teachings of Furihata would result in additional holes, extensions, and protrusions that would read on Applicant's claims as presently broadly written and broadly interpreted.

As to claim 2, Furihata, as combined above, teaches said clamping member includes: a protrusion projected with a fixed height from said main support and a hole, 51 (obvious to use on reflecting plate, col. 4, lines 62-67) which is formed in the reflector and through which said protrusion, 21, of said main support penetrates.

As to claim 3, Furihata, as combined above, teaches a protrusion wherein the surrounding surface serves as a boss (Applicant's includes a boss).

As to claims 4 and 25, APA discloses a liquid crystal display module further comprising:  
an optical sheet, 22, between said liquid crystal display panel and said light guide panel for diffusing light that passes through said light guide panel and adjusting a direction of the light (specification page 4, [0009]);  
a bottom cover, 2, wrapping a rear surface of said reflector and the side surface and a bottom surface of said main support; and  
a top case, 10, wrapping a side surface of said main support and said bottom cover, and wrapping an upper edge of said main support (specification page 2, [0004]).

As to claims 5 and 25, APA discloses a liquid crystal display module further comprising:  
an optical sheet, 22, between said liquid crystal display panel and said light guide panel

for diffusing light that passes through said light guide panel and (Applicant's or) adjusting a direction of the light (specification page 4, [0009]);  
a bottom cover, 2, wrapping a rear surface of said reflector and the side surface and a bottom surface of said main support; and  
a top case, 10, wrapping a side surface of said main support and said bottom cover, and wrapping an upper edge of said main support (specification page 2, [0004]).

As to claims 6, 26, and 29, APA in view of Furihata, as combined above, disclose the liquid crystal display module according to claim 4.

APA in view of Furihata does not explicitly disclose the main support including a protrusion, wherein said bottom cover includes a hole through which the protrusion of said main support penetrates.

Please note: In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom (MPEP 2144.01).

Furihata teaches the protrusions and holes may be used to secure the reflector and possibly other devices (col. 4, line 51, through col. 5, line 67).

Furihata is evidence that ordinary workers in the art of liquid crystals would find the reason, suggestion, or motivation to add a main support including a protrusion, wherein said bottom cover includes a hole through which the protrusion of said main support penetrates to provide proper assembly without an adhesive (col. 4, lines 57-61).

Therefore, it would have been obvious to one having ordinary skill in the art of liquid crystals at the time the invention was made to modify the LCD of APA with a clamping member disposed in said reflector and adjacent said main support for fixing them of Furihata to provide proper assembly without an adhesive.

As to claim 7, Furihata, as combined above, teaches a protrusion wherein the surrounding surface serves as a boss (Applicant's includes a boss).

As to claim 8, APA discloses said main support includes a groove (Applicant's guide surface) engaged with a part of the reflector (Figure 3, specification page 4, [0014]) (Applicant's for fixing said reflector in the horizontal direction).

References cited but not applied are relevant to the instant Application.

### ***Response to Arguments***

Applicant's arguments filed on 14 June 2004 have been fully considered but they are not persuasive.

Applicant's ONLY arguments are as follows:

The applied prior art does not teach "a portion of an upper surface of said reflector is adjacent to a bottom surface of said light guide panel, and wherein a portion

of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel.”

Examiner’s responses to Applicant’s ONLY arguments are as follows:

It is respectfully pointed out that APA in view of Furihata teaches a portion of an upper surface of said reflector is adjacent to a bottom surface of said light guide panel, and wherein a portion of said upper surface of said reflector is non-adjacent to said bottom surface of said light guide panel, per rejections above.

Applicant has not argued rejection rationale of the dependent claims; Applicant has thereby acquiesced.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Monday through Thursday.

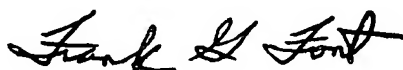
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tlr

Timothy L Rude  
Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
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